

# Engineering and Environmental Consultants, Inc.

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November 3, 2015

Mr. Arturo Burgos Mr. Tom Ryan City of Tucson, Environmental Services 4004 South Park Ave. Building 1 Tucson, Arizona 85726

Re: Annual Closed Landfill Inspection – Cottonwood Landfill

### INTRODUCTION

On September 29, 2015, Engineering and Environmental Consultants, Inc. (EEC) performed the annual field inspection at the closed Cottonwood Landfill. Cottonwood Landfill was operated by the City of Tucson as a Municipal Solid Waste Facility from 1973 through 1985. The property is currently undeveloped and secured with chain link fencing. The property is not subject to groundwater monitoring as there has been no history of groundwater contamination associated with the property. Landfill gas monitoring is conducted quarterly and there are some passive methane vent wells located near the northwest corner of the property.

Annual inspections are required at City of Tucson owned non-regulated closed landfills in accordance with the guidance document entitled "COT Closed Landfill Inspection and Maintenance Reporting and Procedures, March 2011". This guidance document was internally prepared by the City of Tucson Environmental Services Department (COT-ES).

Key elements of this inspection report are:

- A narrative summary of facility conditions including recommended corrective action(s) to be undertaken prior to the next scheduled inspection
- The Landfill Inspection Table used to document observed conditions (Attachment 1)
- An inspection photo log (Attachment 2)

### INSPECTION SUMMARY

The annual field inspection of Cottonwood Landfill is organized and conducted using the inspection report table included in the COT-ES inspection guidance document. A copy of the table filled out during this inspection is included with this report (Attachment 1). The table lists specific landfill items that must be inspected and provides space to comment on the conditions encountered during inspection. The items inspected and the current conditions of these features at Cottonwood Landfill are summarized as follows:

# **Perimeter Security Fence and Gates**

The property is secured on all sides with chain link fence. The fence is in good condition.

# **Inspection Roads**

The existing inspection road on the property is generally in good condition.

### **Stormwater Controls**

No stormwater controls are located on the landfill.

# **Stormwater Retention Basins**

No Stormwater retention basins are located on the landfill.

# Landfill Earthen Cap

The landfill cap is in good condition in most areas (Photo 1), except for an area near the northwest corner of the property where subsidence and cap cracking was observed (Photo 3).

# **Landfill Gas Extraction System Wellfield**

There is no landfill gas extraction system at the landfill. Passive landfill gas vent wells are installed near the northwest corner of the property and appear to be in good condition.

# **Gas Extraction System Compound**

There is no landfill gas extraction system at the landfill.

# **Landfill Gas Monitoring Wells**

The landfill gas monitoring wells on the property appear to be in good condition.

### **Groundwater Monitoring Wells**

The groundwater wells at the property appear to be in good condition.

# **Remediation Equipment**

None.

### **Illegal Dumping**

Downed vegetation and debris was observed on portions of the property. (Photos 2, 4, 5).

### **Neighboring Land Uses**

There have been no changes in land use of neighboring properties since the last inspection.

### RECOMMENDED CORRECTIVE ACTIONS

• The areas of localized surface cracking and subsidence near the northwest corner of the property should be repaired with imported soil. This item was also a recommendation in the previous annual inspection report (dated 11/14/14).

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 A general cleanup of downed vegetation and surface debris as recommended in the 2014 report still should be performed.

No other corrective actions are recommended at this time.

Should you have any questions or require additional information, please contact me at 520-321-4625 (office) or 520-488-9205 (cell).

Sincerely,

Chad Hancock

Field Services Manager, Environmental Services

Attachments:

1: Landfill Inspection Table

2: Site Photographs

EXPIRES 12/31/2016

Professional

# ATTACHMENT 1 LANDFILL INSPECTION TABLE

# CITY OF TUCSON ENVIRONMENTAL SERVICES ANNUAL CLOSED LANDFILL INSPECTION REPORT COTTONWOOD LANDFILL

INSPECTIONITEM	DISCREPANCY	CORRECTIVE ACTION
Perimeter Security Fence and Gate (holes, N structure issues)	None	
Inspection Roads (washouts, obstructions, Npotholes)	None	
Storm Water Controls (berms, let downs, spillways)	None	
ater Retention Basins (washouts, silt in, holding water)	None	
Landfill Earthen Cap (washouts, trash showing, debris and trash)	Surface cracking and subsidence near northwest corner	Import soil and repair
Landfill Gas Extraction System Wellfield (piping, wells, vaults, washouts)	N/A	
<b>n</b> uipment,	N/A	
Landfill Gas Monitoring Wells (including bollards, vaults, locks)	None	
ring Wells (including	N/A	
ent (compound fence,	N/A	
g (including overgrown leless camps, vectors)	Downed vegetation and debris on surface	Clean up
jacent acting	None	
INSPECTOR SIGNATURE		DATE 9  29  15-

# ATTACHMENT 2 SITE PHOTOGRAPHS



Photo 1: View of landfill cap with gas monitoring wells – looking north



Photo 2: Dead vegetation near southwest corner of landfill



Photo 3: Localized surface cracking and subsidence near northwest corner



Photo 4: Miscellaneous debris on landfill surface



Photo 5: Miscellaneous soil and debris dumped on central cap – looking north